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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,153

10/05/2004

Kia Silverbrook

YU176US

6659

24011

7590

06/12/2006

SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER

DO, AN H

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/510,153

Applicant(s)

SILVERBROOK, KIA

Examiner

An H. Do

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/5/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. The benefit claim filed on 05 October 2004 was not entered because the required reference was not timely filed within the time period set forth in 37 CFR 1.78(a)(2) or (a)(5). If the application is an application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a nonprovisional application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the reference to the prior application must be made during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). If applicant desires the benefit under 35 U.S.C. 119 based upon a previously filed application, applicant must file a petition for an unintentionally delayed benefit claim under 37 CFR 1.78(a)(3) or (a)(6). The petition must be accompanied by: (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted); (2) a surcharge under 37 CFR 1.17(t); and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition

should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 05 October 2004 was filed and is being considered by the examiner.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,540,332.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

Claims 1-10 of U.S. Patent No. 6,540,332 disclose the following claimed features:

Regarding claim 1, a printhead chip for an inkjet printhead (claim 1, lines 1-2), the printhead chip comprising: a substrate (claim 1, line 3); and a plurality of nozzle arrangements positioned on the substrate (claim 1, lines 4-5), each nozzle arrangement comprising: a nozzle chamber structure that defines a nozzle chamber in which ink is received (claim 1, lines 6-7); an ink-ejecting member that is positioned in the nozzle chamber and is displaceable in the nozzle chamber to eject ink from the nozzle chamber (claim 1, lines 8-10); at least one actuator that is positioned on the substrate (claim 1, line 11), the, or each, actuator having a working position that is displaceable with respect to the substrate when the actuator receives a drive signal (claim 1, lines 12-14); a sealing structure that is positioned on the substrate and is interposed between the, or each, actuator and the ink-ejecting member to inhibit a passage of ink between

the ink-ejecting member and the actuator (claim 1, lines 15-18); and a motion transmitting structure that bridges the sealing structure (claim 1, lines 20-21), the motion transmitting structure comprising an effort formation that is connected to the working portion of the actuator (claim 7, lines 1-4), a load formation that is connected to the ink-ejecting member and a lever arm formation that interconnects the effort formation and the load formation (claim 7, lines 4-6), the lever arm formation being pivotal with respect to the nozzle chamber structure so that reciprocal movement of the working portion of the actuator is accommodated by pivotal movement of the lever arm formation with the result that the ink-ejecting member is reciprocally displaced towards and away from the ink ejection port (claim 7, lines 7-12).

Regarding claim 2, which is the product of an integrated circuit fabrication technique (claim 2).

Regarding claim 3, in which the substrate includes a silicon wafer substrate and a CMOS drive circuitry layer positioned on the wafer substrate (claim 3).

Regarding claim 4, in which the nozzle chamber structure includes nozzle chamber walls that extend from the substrate and a roof that spans the nozzle chamber walls, the roof defining an ink ejection port from which ink is ejected, in use (claim 4).

Regarding claim 5, in which the nozzle chamber walls and the roof are configured so that the nozzle chamber is substantially rectangular in plan, with the nozzle chamber walls defining a distal end wall, a proximal end wall and a pair of opposed side walls (claim 5).

Regarding claim 6, in which the sealing structure and the motion transmitting structure of each nozzle arrangement define at least part of the proximal end wall (claim 6).

Regarding claim 7, in which each nozzle arrangement includes a thermal bend actuator that includes an elongate actuator arm having a fixed end that is fixed with respect to the substrate and a working end, defined by the working portion, that is displaceable with respect to the substrate, the thermal bend actuator being configured so that, when the actuator receives a signal from the drive circuitry layer, the elongate actuator arm bends towards the substrate, the working end being fixed to the effort formation of the motion transmitting structure so that, upon such movement of the actuator arm towards the substrate, the lever arm formation pivots and the load formation acts on the ink ejection member to drive the ink ejection member towards the ink ejection port (claim 8).

Regarding claim 8, in which the lever arm formation is mounted on the nozzle chamber walls with a pair of opposed, resiliently flexible connectors (claim 9).

Regarding claim 9, an inkjet printhead that includes at least one printhead chip (claim 10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have claims 1-9 of the instant application anticipated by claims 1-10 of Patent '332 in order to obtain more variety of claimed structures.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Silverbrook (US 6,264,850) having common inventor and

assignee with the instant application, discloses the inkjet printhead having a plurality of nozzle arrangements positioned on the substrate, a plurality of actuators, a plurality of sealing structures and a plurality of motion transmitting structures.


Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143. The examiner can normally be reached on Monday-Friday (Flexible).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AD
June 8, 2006


An H. Do
Examiner
Art Unit 2853